



A.D. 1867, 1st MARCH. N° 579.

SPECIFICATION

OF

WILLIAM PARRY AND JOHN FREARSON.

TREATING SEWAGE.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.



A.D. 1867, 1st MARCH. N^o 579.

Treating Sewage.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by William Parry and John Frearson at the Office of the Commissioners of Patents, with their Petition, on the 1st March 1867.

We, WILLIAM PARRY, of Birmingham, in the County of Warwick, Mineral
5 Surveyor, and JOHN FREARSON, of Birmingham, aforesaid, Mechanical Engineer, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN TREATING OR PURIFYING SEWAGE, AND IN APPARATUS TO BE USED FOR THAT PURPOSE," to be as follows :—

Our improvements in treating or purifying sewage consist in mixing there-
10 with, as herein-after described, clay, clay iron ore, or manganesic earths, whereby the suspended and dissolved organic and inorganic matters contained therein are precipitated, and the water of the sewage is rendered clear and inodorous, or nearly so. We mix the clay, or clay iron ore, or manganesic earth with water to the consistence of cream or liquid mud, and add the mixture to
15 the sewage to be treated. The said mixture and the sewage is intimately mixed in any convenient manner, and afterwards allowed to stand at rest for a time. The solid matter of the clay, or clay iron ore, or manganesic earth combines with the principal part of the organic and inorganic matters of the sewage, and gradually subsiding leaves the supernatant water free or nearly
20 free from the said organic and inorganic matters. The water may be drawn off from the sediment by the use of the apparatus constituting the second part of our Invention, or in any other convenient manner, and may be poured into a stream without injury thereto. The solid matter constitutes a valuable manure.

Parry & Frearson's Improvements in Treating Sewage.

The apparatus to be used in treating sewage, and which constitutes the second part of our Invention, is constructed as follows:—In the tank or reservoir in which the sewage is treated, or in which after mixture with the clay, clay iron ore, or manganesic earth it is allowed to rest for the subsiding of the solid matter, we fix a flexible or a jointed pipe. The said pipe opens 5 at bottom into a conduit below the bottom of the tank or reservoir, and its top is supported by a float or buoy which keeps it at the top of the liquid. As the liquid rises and falls the top of the pipe rises and falls with it. The said pipe is furnished with valves at top and bottom, by opening which the liquid can be run off, and by closing which the liquid is retained in the tank or 10 reservoir; a floating scum board or guard for keeping corks and floating bodies from the pipe surrounds the top of the pipe. In using this apparatus the valves are closed during the filling of the tank or reservoir, and during the subsiding of the solid matter. When the water of the sewage has become sufficiently clear the valves are opened and it is drawn off.

15

LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1867.